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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/525,251

08/05/2005

Richard Perrin

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EXAMINER

KOSANOVIC, HELENA

ART UNIT

PAPER NUMBER

3749

MAIL DATE

DELIVERY MODE

06/12/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/525,251	<b>Applicant(s)</b> PERRIN, RICHARD	
	<b>Examiner</b> HELENA KOSANOVIC	<b>Art Unit</b> 3749	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 March 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☐ Claim(s) 44-54, 56-60 and 66-73 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 44-54, 56-60 and 66-73 is/are rejected.
- 7) ☐ Claim(s) 55 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

Applicant's amendments filed 3/14/2008 are acknowledged.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 44-54, 56-58 and 65-67, 69-70, and 72-73 are rejected under 35 U.S.C. 102(b) as being anticipated by Magill 4,184,288.

Magill teaches an invention as claimed:

Regarding claims 44 and 69, a damper for an air flow duct comprising: ducting (10); a damper (20, fig. 1) element in the ducting and movable between a first, closed position and a second, open position (figs. 6-7); biasing means (28, 30, col. 5, ll. 67-68 and col. 6, l. 1) biasing the damper element into its closed position; and retention means (fig. 12, col. 5, ll. 62-68) for retaining the damper element in an open position; the retention means comprising: an actuating member (70, figs. 9-11);

a retention member (19, 22 fig.3) which is fixed relative to the damper element (element 19) and can be secured by the action of the actuating member to retain the damper element in an open position, which securing can be released by movement of

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the actuating member to release the damper element so that the latter is moved by the biasing means into its closed position (col. 5, ll. 62-68, col. 6, l.1);

a body member (68, figs. 10-11) which is fixed to an opening in a circumferential wall of the ducting, the body member having a through-hole (where element 82 is located) which passes from an exterior to an interior of the body member; and a movable member (82) in the through-hole and arranged so that it moves when the actuating member moves (fig. 9-11), the movable member being arranged such that it protrudes or protrudes further from an opening in the exterior of the body member externally from the ducting fig. 1, (externally means outwardly from the ducting) when the actuating member moves to release the damper element (figs. 9-11);

at least one spring element 162,158 (fig. 17) attached to the damper element, the at least one spring element biasing the damper element into its closed position (col. 8, ll. 32-37)

Regarding claims 45 and 70, the actuating member comprises a temperature-sensitive element (col. 5, ll. 28-32) for releasing the retention member to release the damper element when the temperature-sensitive element reaches a certain temperature (col. 5, ll. 28-29).

Regarding claim 46, the movable member is an axially- movable rod (figs. 9-11).

Regarding claim 47, the body member comprises a cylindrical casing (86) mounted by a holder (fig. 3, see paragraph below where the examiner labeled originally not labeled element with darkened arrow), said opening in the exterior of the body member being in the holder.

Regarding claim 48, body member 68 is extended, the temperature-sensitive element being adjacent one end of the body member and the opening in the exterior of the body member being adjacent the other end of the body member (fig. 9).

Regarding claim 49, the casing is an elongate cylinder (86) and the holder is cylindrical with a bore (hole in the holder/mounting member) in one end receiving an end portion of the cylinder, said opening in the exterior of the body member being at the other end.

Regarding claim 50, the temperature-sensitive element comprises a heat-softenable or meltable material which when hard prevents movement of the movable member and when soft or molten permits movement of the movable member (col. 5, ll. 28-32).

Regarding claim 51, the temperature-sensitive element being such that the actuating member can move relative to the casing (figs. 10-11) when said certain temperature is reached, the movable member being in contact with or being contactable by the actuating member when the actuating member moves so that the movement of the actuating member causes the movable member to move and protrude or protrude further through said opening (figs. 9-11).

Regarding claim 52, the casing has a recess (see paragraph below where the examiner labeled originally not labeled elements for clarification with darkened arrows), the movable member is within the casing (figs. 9-11), and the actuating member has a detent (triangle part of element 70) engaging in the recess such that when the heat-softenable or meltable material is soft or molten, a force on the actuating member in a

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direction of its movement with respect to the casing would cam the detent out of the recess in a direction generally at right angles to the direction of movement of the actuating member and release the actuating member, thereby causing the movable member to move, the heat-softenable or meltable material being between the detent and the casing and being such that said force applies a force on the heat-softenable or meltable material generally at right angles to the direction of movement of the actuating member.

Regarding claim 53, the heat-softenable or meltable material is in tension under the action of said force on the actuating member (figs. 9-11).

Regarding claim 54, the actuating member comprises an end cap (end on the right-hand part of element 70) which is adjacent or abuts the end of the movable member (fig. 9), the end piece having elongate detents (left side of the triangle 70) which extend outside the casing and parallel to the movable member (figs. 9-11).

Regarding claim 56, the retention means further comprising a sprung piece (12, fig. 20) fixed to the ducting and acting as an engaging member such that the actuating member capable to engage the sprung piece to press the sprung piece against the retention member.

Regarding claim 57, the damper element is rotatably mounted for movement between its closed position and an open position, and the retention member is generally sector shaped (figs. 6-7).

Regarding claim 58, the retention member has a number of recesses (80, fig. 3) or cut-outs for engagement directly **or indirectly** by the actuating member (fig.2), to

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provide a number of different open positions of the damper element, of various degrees of opening (col. 5, ll. 55-65), a force being applied directly **or indirectly** to cam one or more elements of said actuation member such (68, fig. 12, col. 5, ll. 55-68) that the respective recess or cut-out will cease to be engaged and the damper element will move into its closed position when the actuating member exerts no pressure on the retention member.

Regarding claim 60, the body member and movable member are in the form of a removable cartridge (col.5, l. 62).

Regarding claim 66, a damper (fig.1) for an air flow duct comprising: ducting (16); a rotary damper element (20) carried on an axle (fig. 19) in the ducting and movable between a closed position and an open position (figs. 6-7); biasing means (28, 30) biasing the damper element into its closed position; and retention means (fig.12, col.5, ll. 65-68) retaining the damper element in an open position; the retention means comprising: an actuating member (70); a retention member (19, 23, fig. 3) which is fixed relative to the damper element and is secured by the action of the actuating member to retain the damper element in an open position, which securing can be released to release the damper element so that it is moved by the biasing means into its closed position (); and a support member (38a figs. 15-16) fixed to the circumferential wall of the ducting and supporting at least part of the retention means, the support member having a base (38, 38a) and at least a first limb (100), at a substantial angle to the base (figs. 15-16), which limb is adjacent the inner circumferential wall of the ducting and has a notch (circles on

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element 38, fig. 16) on its open end passing over the damper element axle; and securing means (102) securing the limb to the inner circumferential wall of the ducting at a position between the axle and the base of the support member;

at least one spring element 162,158 (fig. 17) attached to the damper element, the at least one spring element biasing the damper element into its closed position (col. 8, ll. 32-37)

Regarding claims 67 and 73, the support member has a further limb (lower element 100, fig. 16) on the opposite side of the retention member to the actuating member, which further limb acts as a backing piece and wherein the support member has a further limb in the form of a sprung piece (12, fig. 20) on the same side of the retention member as the actuating member, which sprung piece is pressed against the retention member by the actuating member when the damper flap is retained in an open position (fig. 1), whereby when the damper flap is retained in an open position, the actuating member presses the sprung piece against the retention member which in turn is pressed against the backing piece (figs. 1, 15-16).

Regarding claim 67, a damper 20 for an air flow duct comprising: ducting 10 (fig. 1); a damper element 20 in the ducting and movable between a first, closed position and a second, open position (figs. 6-7); biasing means (28, 30, col. 5, ll. 67-68 and col6, l. 1) biasing the damper element into its closed position; and retention means (fig. 2, col. 5, ll. 62-68) for retaining the damper element in an open position, the retention means comprising: an actuating member 72 (fig. 2); a retention member 19, 22 and 28 (figs. 2 and 3) which is fixed relative to the



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damper element and which can be secured by the actuating member bearing on the retention member to retain the damper element in an open position, which securing can be released by movement of the actuating member away from the retention member to release the damper element so that the damper element is moved by the biasing means into its closed position (col. 5, ll. 50-68);

a body member (68, fig. 9-11 ) which is fixed to an opening in a circumferential wall of the ducting, the body member having a through-hole (hole within the body member) which passes from an exterior to an interior of the body member; and

a movable member 82, (fig. 12) in the through-hole and arranged so that it moves when the actuating member moves, the movable member being arranged such that it protrudes or protrudes further from an opening in the exterior of the body member when the actuating member moves to release the damper element.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 59 and 71 is rejected under 35 U.S.C. 103(a) as being unpatentable over Magill 4,184,288 in view of Nailor 5,779,540.

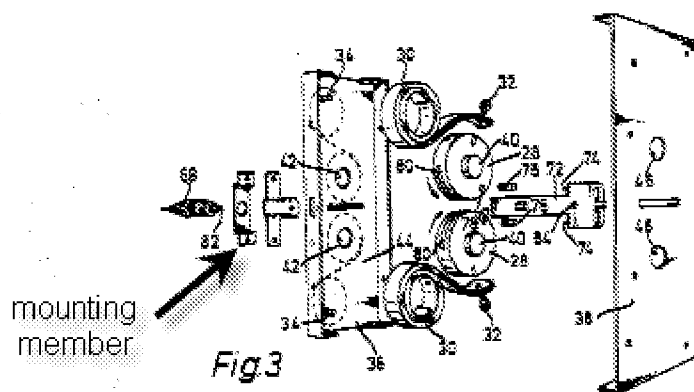
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Magill teaches the invention as discusses above, but is not specific about micro switch.

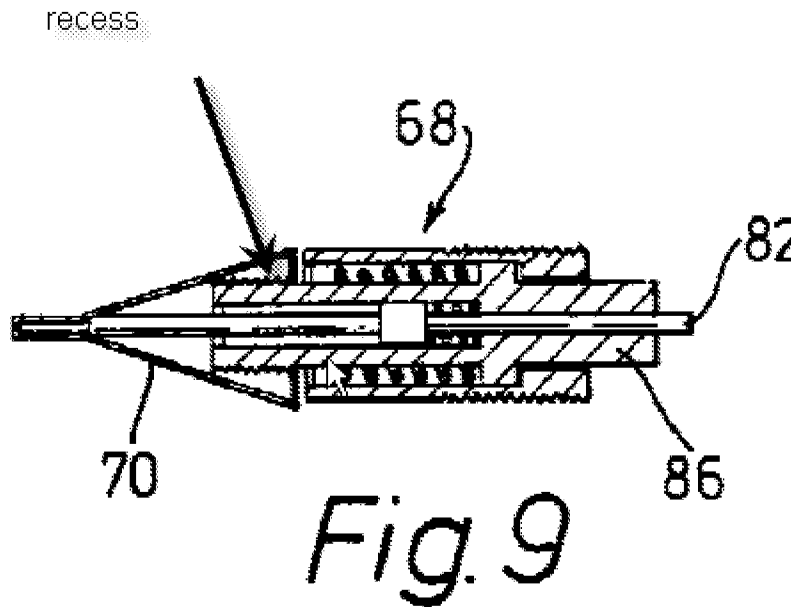
Nailor teaches a damper having a micro switches 92, 94 (col. 8, ll. 37-38), and 160 (col. 8, l. 51).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have the Magill invention modified with the Nailor micro switches in order to provide indication weather the blades are open or closed (col. 8, l. 43-50) if the sufficient amount of smoke (or temperature) is detected in the room (col. 8, ll. 56-60).

3. The examiner labeled originally not labeled elements for clarification:



(fig. 3, of Magill)



(fig. 9 of Magill)

***Allowable Subject Matter***

Claim 55 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

Applicant's arguments filed 10/12/2007 have been fully considered but they are not persuasive.

The applied prior art meeting all structural limitation and functionalities as claimed. It anticipates claimed invention, as is capable to perform all intended use functions as claimed.

Regarding the argument about the pin, protruding externally from the ducting, the examiner notes that pin 70 protruding externally from the ducting (fig. 1) wherein externally means outwardly from the both side walls 12 of the ducting 10 (for example, on figure 1 the pin 70 protrudes from the wall 12 externally/outwardly from ductwork 10. Inwardly would be inside the two sidewalls 12 of ducting 10, where the gears 22 are located, fig. 2).

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HELENA KOSANOVIC whose telephone number is (571)272-9059. The examiner can normally be reached on 8:30-5:00, Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Steve McAllister can be reached on 571-272-6785. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/H. K./  
Examiner, Art Unit 3749

/Steven B. McAllister/  
Supervisory Patent Examiner, Art Unit 3749

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